#### In The United States Patent And Trademark Office

Appl. No.:

10/041,610

Confirmation No.: 5419

Applicant(s): Filed:

Robert Aarts et al. January 10, 2002

Art Unit:

2143

Examiner:

Jean Gilles, Jude

Title:

ACCESSING FUNCTIONALITIES IN HYPERMEDIA

Docket No.:

042933/305194

Customer No.: 00826

## Filed Via USPTO E-Filing

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# APPEAL BRIEF TRANSMITTAL (PATENT APPLICATION – 37 C.F.R. § 41.37)

| 1. | Transmitted herewith is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on December 1, 2006.  |
|----|--|
| 2. | Applicant claims small entity status.  |
| 3. | Pursuant to 37 C.F.R. § 41.20(b)(2), the fee for filing the Appeal Brief is:  small entity \$250.00  other than small entity\$500.00  Appeal Brief fee due \$500.00  Fee is Enclosed  Please charge the fee to Deposit Account 16-0605.  Any additional fee or refund may be charged to Deposit Account 16-0605. |

Respectfully submitted,

Chad L. Thorson

Registration No. 55,675

**CUSTOMER NO. 00826 ALSTON & BIRD LLP** 

Bank of America Plaza 101 South Tryon Street, Suite 4000 Charlotte, NC 28280-4000 Tel Charlotte Office (704) 444-1000 Fax Charlotte Office (704) 444-1111

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON JANUARY 31, 2007. LEGAL02/30243534v1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:

10/041,610

Confirmation No.: 5419

Applicant(s):

Robert Aarts et al.

Filed:

January 10, 2002

Art Unit:

2143

Examiner:

Jean Gilles, Jude

Title:

ACCESSING FUNCTIONALITIES IN HYPERMEDIA

Docket No.:

042933/305194

Customer No.: 00826

#### Filed Via USPTO E-Filing

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## APPEAL BRIEF UNDER 37 CFR § 41.37

This Appeal Brief is filed pursuant to the Notice of Appeal filed December 1, 2006.

#### 1. Real Party in Interest.

The real party in interest in this appeal is Nokia Corp., the assignee of the abovereferenced patent application.

#### Related Appeals and Interferences. 2.

There are no related appeals and/or interferences involving this application or its subject matter.

#### 3. Status of Claims.

The present application currently includes Claims 1-26, which all stand rejected.

#### 4. Status of Amendments.

There are no unentered amendments in this application.

#### Summary of Claimed Subject Matter. 5.

Filing Date: January 10, 2002

Page 2

Independent claim 1 is directed to a method of accessing functionalities in hypermedia to be parsed and rendered by a user agent. The hypermedia includes at least one element that has a predetermined attribute whereby a dynamically assignable keyboard shortcut for the user agent actuates a predetermined functionality associated with the at least one element (e.g., page 3, lines 14-17). The method includes parsing the hypermedia (e.g., page 3, line 18 and S1 of FIG. 7) and collating data corresponding to the at least one element in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute (e.g., page 3, lines 18-19 and S2 and S3 of FIG. 7). A display of the collated data is then rendered (e.g., page 3, line 20 and S5 of FIG. 7).

Independent claim 7 is directed to a browser for a user agent for rendering hypermedia that includes at least one element that has a predetermined attribute whereby a dynamically assignable keyboard shortcut for the user agent actuates a predetermined functionality associated with the at least one element (e.g., page 3, lines 22-25). The browser includes software to provide parsing of the hypermedia (e.g., page 3, line 26), identification of data corresponding to the at least one elements in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute (e.g., page 3, lines 26-28), and a process to render a display of the data (e.g., page 3, line 28).

Independent claim 11 is directed to a device (e.g., MS-1 of FIG. 1) for rendering hypermedia received from a remote server. The device includes a processor (e.g., element 8 of FIG. 2) for processing the hypermedia and a user interface (e.g., elements 3, 4 and 5 of FIG. 2) including a display device (e.g., element 5 of FIGS. 1 and 2) and a keyboard (e.g., elements 3 and 4 of FIGS. 1 and 2) with a plurality of keys (e.g., page 4, lines 12-14). The keyboard is operable in a first mode to enter associated alphanumeric data (e.g., page 4, line 14). The keyboard is operable in a second mode to actuate respective keyboard shortcuts dynamically assigned thereto by elements in the hypermedia (e.g., page 4, lines 14-16). The processor and the display device are operable in a first display configuration to display the hypermedia (e.g., page 4, lines 16-18). The processor is operable to identify elements that define predetermined keyboard shortcuts in the hypermedia (e.g., page 4, lines 18-19), and to form an options list containing data associated with the identified elements (e.g., page 4, lines 19-20). The processor

Filing Date: January 10, 2002

Page 3

and the display device are operable in a second display configuration to display the options list (e.g., page 4, lines 20-22).

Independent claim 19 is directed to a computer readable medium (e.g., elements 9 and 10 of FIG. 2) storing computer executable code that when executed by a processor (e.g., element 8 of FIG. 2) performs the steps of parsing hypermedia (e.g., S1 of FIG. 7), identifying data corresponding to elements that define predetermined keyboard shortcuts in the hypermedia (e.g., S2 and S3 of FIG. 7 and page 15, lines 24-25), and rendering a display of the data (e.g., S5 of FIG. 7).

Independent claim 20 is directed to a signal (e.g., page 5, lines 25-27) including a carrier that carries instructions in the form of computer executable code that when executed by a processor provides parsing hypermedia (e.g., S1 of FIG. 7), identifying data corresponding to elements that define predetermined keyboard shortcuts in the hypermedia (e.g., S2 and S3 of FIG. 7 and page 15, lines 24-25), and rendering a display of the data (e.g., S5 of FIG. 7).

Independent claim 21 is directed to a method of collating and providing a display of mark up language elements embedded in hypermedia that is loaded by a browser and at least partly rendered in a display of a mobile device. The method includes parsing, using a processor (e.g., element 8 of FIG. 2) of the mobile device (e.g., element MS-1 of FIG. 1), mark-up code of the hypermedia (e.g., page 3, line 18 and S1 of FIG. 7). The method also includes identifying at least one mark up code element in the hypermedia having an accesskey attribute (e.g., page 3, lines 18-19 and S2 and S3 of FIG. 7) and rendering a list of the identified elements instead of the hypermedia in the display (e.g., page 3, line 20 and S5 of FIG. 7).

Independent claim 26 is directed to a device (e.g., element MS-1 of FIG. 1) including a processor (e.g., element 8 of FIG. 2) and a display (e.g., element 5 of FIGS. 1 and 2). The processor is operable to run a browser (e.g., page 5, lines 22-23). The display is operable to display at least part of the hypermedia loaded by the browser (e.g., page 6, line 19). The processor is further operable to parse mark-up code of the hypermedia at least partly displayed in said display (e.g., page 3, line 26), to identify at least one mark up code element in the hypermedia having been assigned an accesskey attribute (e.g., page 3, lines 26-28) and render a list including the identified elements for display, instead of the hypermedia, in the display (e.g., page 3, line 28).

Applicant: Robert Aarts et al.

Appl. No.: 10/041,610

Filing Date: January 10, 2002

Page 4

## 6. Grounds of Rejection to be Reviewed on Appeal.

- (i) Claims 1-8, 10-21 and 23-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Omoigui (U.S. Patent Application Publication No. 2003/0126136) in view of Facenda (U.S. Patent No. 6,569,604).
- (ii) Claims 9 and 22 currently stands rejected under 35 U.S.C. §103(a) as being unpatentable over Omoigui in view of Facenda and further in view of Schilit et al. (U.S. Patent No. 6,674,453).

### 7. Argument.

In an exemplary embodiment according to independent claim 1, for example, a method of accessing functionalities in hypermedia to be parsed and rendered by a user agent is provided. The hypermedia includes at least one element that has a predetermined attribute whereby a dynamically assignable keyboard shortcut for the user agent actuates a predetermined functionality associated with the at least one element. The method includes parsing the hypermedia and collating data corresponding to the at least one element in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute. A display of the collated data is then rendered. Thus, for example, a method of quickly accessing links in a XHTML document too large to be seen in its entirety on a small screen such as on a mobile device is provided. The method involves collating elements in documents such as, the XHTML document, that have an accesskey or predetermined attribute and displaying a list of the collated elements. Therefore, according to embodiments of the claimed invention, the predetermined attribute is a prerequisite for an element to be displayed as the collated data. Thus, the fact that a keyboard shortcut has been assigned based on the predetermined attribute indicates that an element should be displayed.

The claimed invention, as recited, for example, by the independent claims, is directed to subject matter that is neither taught nor suggested by any of the cited references, taken individually or in combination. However, in any case, the current rejections are improper for legal reasons.

Filing Date: January 10, 2002

Page 5

## A. Brief Summary of Argument

Applicants respectfully submit, as an initial matter, that the Examiner made errors in rejecting the claimed invention which are not in conformity with the patent laws. Applicants also respectfully submit that the cited references do not teach or suggest the claims of the present application. In this regard, as a brief summary, Applicants submit that, in particular, the cited references fail to teach or suggest collating or identifying data corresponding to the at least one elements in the hypermedia that have been assigned a keyboard shortcut (or accesskey attribute) using the predetermined attribute as generally set forth in the claimed invention.

## B. The Final Office Action failed to establish prima facie obviousness.

Applicants initially note that the final Office Action failed to establish *prima facie* obviousness with respect to at least independent claim 1. The requirements for *prima facie* obviousness are well known. First, there must be some suggestion or motivation to modify the reference or to combine the reference teaching. Second, there must be a reasonable expectation of success. Third, the prior art reference must teach or suggest all the claim limitations. However, in the present rejections, the Office Action has at least failed to provide a reference that teaches or suggests all claim limitations and thus, the current rejections are improper in view of MPEP 706.02(j) citing the patent laws.

The final Office Action completely ignores an element recited in independent claim 1. In this regard, the final Office Action asserted that Omogui discloses "collating data corresponding to those elements in the hypermedia that support said predetermined attribute" (see the last line of page 3 to first line of page 4 of the final Office Action). However, independent claim 1 recites collating data corresponding to the at least one element in the hypermedia **that have been assigned a keyboard shortcut** using said predetermined attribute. Applicants respectfully submit that the bold terms above represent a feature that is not even asserted in the final Office Action as being disclosed in any of the cited references. Thus, a *prima facie* case of obviousness has not been established, because the final Office Action completely ignores this feature, contrary to the requirements of MPEP 706.02(j) citing the patent laws, with respect to independent claim 1.

Independent claim 7 recites substantially similar subject matter to the recitation of

Filing Date: January 10, 2002

Page 6

independent claim 1 cited above except that data corresponding to the at least one elements in the hypermedia are identified instead of collated. The Office Action fails to provide a proper rejection for independent claim 7 as well, since the Office Action merely states that independent claim 7 is rejected along the same rationale as that used for independent claim 1. Accordingly, a *prima facie* case of obviousness has also not been established with respect to independent claim 7.

Independent claims 11, 19, 20, 21 and 26 contain similar recitations to those highlighted above with respect to independent claims 1 and 7, except that independent claims 11, 19, 20, 21 and 26 recite that elements **that define** predetermined keyboard shortcuts (or accesskey attributes (claims 21 and 26)) are identified. However, even with respect to these claims, the Office Action fails to even assert that any of the cited references teach or suggest that elements that define predetermined keyboard shortcuts (or accesskey attributes) are identified as recited in independent claims 11, 19, 20, 21 and 26. Instead, the Office Action merely states that independent claims 11, 19, 20, 21 and 26 stand rejected for the same rationale provided for independent claims 1 or 7, which rationale has already been shown to be faulty due to a failure to establish a *prima facie* case of obviousness with regard to the respective rejections.

Applicants also respectfully note that independent claim 26 further recites rendering of a list including identified elements for display, instead of the hypermedia, in the display. This feature is neither taught nor suggested in any of the cited references. Moreover, the Office Action fails to even assert that such feature is taught or suggested in the cited references. Instead the Office Action merely relies on the rejection of independent claim 11. However, independent claim 11 lacks this specific feature. Thus, the above described feature of independent claim 26 is not asserted to be taught or suggested in any reference and is completely ignored, thereby serving as further evidence of the failure of the Office Action to establish a *prima facie* case of obviousness with regard to the rejections.

Accordingly, for all the reasons stated above, the Office Action has failed to establish a *prima facie* case of obviousness with respect to the independent claims of the present application and thus, the current rejections are improper as a matter of law.

Applicant: Robert Aarts et al.

Appl. No.: 10/041,610

Filing Date: January 10, 2002

Page 7

# C. Claims 1-8, 10-21 and 23-26 are not obvious in view of Omoigui and Fascenda.

Claims 1-8, 10-21 and 23-26, rejected solely under § 103(a) as being unpatentable over Omoigui in view of Fascenda are directed to methods, devices, a browser, a signal and a computer readable medium for providing display of elements in hypermedia.

An advantage of the claimed invention, for example, as claimed in independent claim 1 is that links in a document such as, for example, a XHTML document, that is too large to be seen in its entirety on a small screen, such as on a mobile device, may be quickly accessed. The method of claim 1 involves collating elements in the document that have a predetermined attribute and displaying a list of the collated elements. In this regard, independent claim 1 recites, *inter alia*, hypermedia that includes at least one element that has a predetermined attribute whereby a dynamically assignable keyboard shortcut for the user agent actuates a predetermined functionality associated with the at least one element and collating data corresponding to the at least one element in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute. In other words, the predetermined attribute is a prerequisite for an element to be displayed as the collated data. Thus, as stated above, the fact that a keyboard shortcut has been assigned based on the predetermined attribute indicates that an element should be displayed.

Omoigui is directed to an integrated system for knowledge retrieval, management, delivery and presentation. Users submit queries from a client to a server that maintains and holds information about objects to be retrieved. The server performs a search for data objects based on a query and returns information to the client about objects discovered in the search. The objects may be, for example, links, calendar items, emails, address book items or documents and multimedia objects stored in client memory. The client receives information and presents search results to the user according to a predetermined and customizable theme or skin (paragraph [0284]). The search results are then sent to the client in schematic results mark-up language (SRML) in order to permit clients to render the same search results in different ways depending upon a current skin selected. There is no relationship between elements collected in Omoigui and a keyboard shortcut. More specifically, Omoigui fails to provide any such teaching of keyboard shortcuts playing any role in collating elements.

Filing Date: January 10, 2002

Page 8

Additionally, in Omoigui, the return of objects discovered in the search is performed based on the semantics associated with the objects. There is no disclosure of any collation (e.g., ordering and arranging) of such objects based on predetermined attributes as provided in independent claim 1. Accordingly, Omoigui fails to teach or suggest collating data corresponding to the at least one element in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute as claimed in independent claim 1.

Fascenda discloses the use of features such as keyboard shortcuts. However, Fascenda fails to cure the deficiency of Omoigui. In particular, Fascenda discloses the use of accesskey attributes in a conventional manner. In other words, Fascenda discloses execution of a function associated with an element in a hypermedia document by operation of a key without any mention of collating data corresponding to elements that have been assigned a keyboard shortcut. In contrast, independent claim 1 recites collating data corresponding to the at least one element in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute. Fascenda fails to provide any disclosure suggesting collating any data corresponding to elements that have been assigned a shortcut using a predetermined attribute. In other words, Fascenda fails to disclose that the predetermined attribute is a prerequisite for an element to be displayed as the collated data or that elements are collated based on keyboard shortcuts as is required under the recitation of independent claim 1. Accordingly, Fascenda fails to teach or suggest collating data corresponding to the at least one element in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute as claimed in independent claim 1.

Since none of the cited references alone teach or suggest <u>collating data corresponding to</u> the at least one elements in the hypermedia that have been assigned a keyboard shortcut using the <u>predetermined attribute</u> as claimed in independent claim 1, any combination of the cited references likewise fails to render independent claim 1 obvious for at least the same reasons described above.

Furthermore, even if it were assumed for the sake of argument that the combination of Omoigui and Fascenda met the claims (an assumption with which Applicants expressly disagree), there is still no motivation to combine Omoigui and Fascenda. In this regard, a teaching or motivation to combine the references is essential in order to properly combine references. *In re Fine*, 337 F.2d 1071, 1075 (Fed. Cir. 1988). In fact, the Court of Appeals for

Filing Date: January 10, 2002

Page 9

the Federal Circuit has stated that, "[c]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999). Although the evidence of a suggestion, teaching, or motivation to combine the references commonly comes from the prior art references themselves, the suggestion, teaching, or motivation can come from the knowledge of one of ordinary skill in the art or the nature of the problem to be solved. Id. In any event, the showing must be clear and particular and "[b]road conclusory statements regarding the teaching effect of multiple references, standing alone, are not 'evidence'." Id. The Office Action states that one of skill in the art would have been motivated to modify Omoigui in view of Fascenda "to optimized the advantage of the hypermedia system" (see page 5, lines 17-18 of the final Office Action). This is the only motivation provided in the final Office Action. However, the Applicant seasonably challenges this assertion in the Office Action as being a broad conclusory statement which, standing alone, is not "evidence", as required under the patent laws, of motivation to combine the cited references. Such a broad statement does not provide evidence of motivation for one seeking to collate data corresponding to elements in hypermedia that have been assigned a keyboard shortcut using a predetermined attribute to combine Omoigui and Fascenda. This is particularly evident in light of the respective teachings of each of the references, which fail to motivate such a combination.

In this regard, Omoigui is directed to finding and storing documents on the World Wide Web, emails, calendar items, address book entries and locally stored documents. Not all of the recited objects support accesskey attributes. Thus, if accesskey attributes such as predetermined attributes associated with a keyboard shortcut were used to indicate which objects are to be stored (i.e., collated), objects that do not support accesskey attributes, such as calendar items, emails, address book entries and locally stored documents would not be stored and thus, the whole idea of Omoigui would be compromised. Accordingly, one skilled in the art would not modify Omoigui in a way that would arrive at usage of elements having been assigned a keyboard shortcut as recited in independent claim 1.

Omoigui also refers to hypermedia which could be contents of a database searched by a server to find objects to store in the database. However, a skilled person would not amend a

Filing Date: January 10, 2002

Page 10

subset of objects stored in the database to be <u>assigned a keyboard shortcut using a predetermined</u> <u>attribute</u> to indicate which elements should be collated, since if the objects were not to be collated there would be no point in storing them in the database.

Omoigui also refers to hypermedia which could refer to SRML data. However, a skilled person would not modify the SRML code to have accesskey attributes to indicate which objects are to be displayed to the user, since if the objects were not to be displayed to the user, they would not be included in the SRML code in the first place. Moreover, it would not make sense to add accesskey attributes to objects in the database for the purpose of specifying that the objects should be collated since the fact that the objects are stored in the database is itself indicative that the objects should be collated. Additionally, the purpose for the conventional use of accesskey attributes as disclosed in Fascenda is to facilitate user interaction. However, a user of Omoigui would never directly interact with the SRML code or the database. Thus, one skilled in the art would not be motivated to add accesskey attributes to either the objects stored in the database or the SRML code. Moreover, an important feature of Omoigui is that the presentation format of the search results is not pre-defined on the server, but is selected on the client. Thus, one skilled in the art would not be motivated to add a user interaction feature to the SRML code at the server before it is sent, since this would counteract the purpose of the SRML code and the skin, i.e., to define all the presentation features at the client side.

The final Office Action states that providing an accesskey functionality at the server side would not necessarily be contrary to the teachings of Omoigui of permitting side control of presentation. Applicants respectfully disagree with this analysis. As stated above, "collating" implies more than just collecting the elements, it also implies ordering and arranging the elements. Accordingly, collating affects the presentation of the information in a way not contemplated by Omoigui. Moreover, the collation is performed for the elements that have been assigned a keyboard shortcut, thereby implying that the elements are arranged and ordered based in part on their keyboard shortcut attributes. As stated in paragraph [0276] of Omoigui, "The XML Web Service will return SRML to a client, in response to the client's semantic query. This way, the XML Web Service will not "care" how the results are being presented at the client". As such, Omoigui actually teaches away from the claimed invention since "collating" or arranging data to be presented with respect to keyboard shortcuts assigned by the server surely implies

Filing Date: January 10, 2002

Page 11

"caring" about how results are presented. Omoigui's teaching away is yet further evidence that the combination of Omoigui and Fascenda is improper.

Accordingly, for all the reasons above, Applicants respectfully submit that there is no motivation to combine the references. Since Omoigui and Fascenda cannot properly be combined, it is respectfully submitted that the rejections of all claims based on the combination of these references is overcome.

Independent claims 7, 11, 19-21 and 26 each include recitations substantially similar to those of independent claim 1 with respect to elements that have been assigned a keyboard shortcut except that the elements are identified. Thus, independent claims 7, 11, 19-21 and 26 are patentable for at least some of those reasons given above for independent claim 1. Claims 2-6, 8-10, 12-18 and 23-25 depend either directly or indirectly from respective independent claims 1, 7, 11 and 21, and thus include all the recitations of their respective independent claims. Therefore, dependent claims 2-6, 8-10, 12-18 and 23-25 are patentable for at least those reasons given above for independent claims 1, 7, 11 and 21.

# D. Claims 9 and 22 are not obvious in view of Omoigui, Fascenda and Schilit.

Claims 9 and 22, rejected solely under § 103(a) as being unpatentable over Omoigui in view of Fascenda and further in view of Schilit depend from independent claims 7 and 21, respectively.

As stated above, the combination of Omoigui and Fascenda fails to teach or suggest identifying data corresponding to the at least one elements in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute as recited in independent claim 7 and as generally set forth in independent claim 21. Schilit also fails to teach or suggest identifying data corresponding to the at least one elements in the hypermedia that have been assigned a keyboard shortcut using the predetermined attribute as generally set forth in independent claims 7 and 21 and is not cited as such.

Since Omoigui, Fascenda and Schilit each fail to teach or suggest the aforementioned features of independent claims 7 and 21, any combination of Omoigui, Fascenda and Schilit also fails to teach or suggest the subject matter of independent claims 7 and 21. Thus, Omoigui, Fascenda and Schilit, taken either individually or in combination, do not anticipate, or render

Filing Date: January 10, 2002

Page 12

independent claims 7 and 21 obvious. Claims 9 and 22 depend directly from independent claims 7 and 21, respectively, and as such, include all the recitations of their respective independent claims. Dependent claims 9 and 22 are therefore patentably distinct from the cited references, individually or in combination, for at least the same reasons as given above for independent claims 7 and 21.

#### F. Conclusion

Since none of the cited references alone teach or suggest the above recited claimed features of independent claims 1, 7, 11, 19-21 and 26, the cited references, either individually or in combination, fail to render independent claims 1, 7, 11, 19-21 and 26 obvious for at least the same reasons described above. Claims 2-6, 8-10, 12-18 and 22-25 depend either directly or indirectly from respective ones of independent claims 1, 7, 11 and 21, respectively, and thus include all the recitations of their respective independent claims. Therefore, dependent claims 2-6, 8-10, 12-18 and 22-25 are patentable for at least those reasons given above for the respective independent claims. Furthermore, the rejections of claims 1-26 are improper for failure to establish *prima facie* obviousness.

Accordingly, for all the reasons stated above, Applicant respectfully requests that the rejections of claims 1-26 be reversed.

Filing Date: January 10, 2002

Page 13

# 8. Claims Appendix.

The claims currently on appeal are as follows:

1. (Previously Presented) A method of accessing functionalities in hypermedia to be parsed and rendered by a user agent, the hypermedia including at least one element that has a predetermined attribute whereby a dynamically assignable keyboard shortcut for the user agent actuates a predetermined functionality associated with the at least one element, the method comprising:

parsing the hypermedia;

collating data corresponding to the at least one element in the hypermedia that have been assigned a keyboard shortcut using said predetermined attribute; and

rendering a display of the collated data.

- 2. (Original) A method according to claim 1 wherein the predetermined attribute comprises accesskey operability for assigning a particular control key for the user agent to the element.
- 3. (Original) A method according to claim 2 including rendering the hypermedia, and operating a control of the user agent to render the collated data instead of the hypermedia.
- 4. (Previously Presented) A method according to claim 3 including making a selection from the collated data to select said predetermined functionality.
- 5. (Original) A method according to claim 1 wherein the parsing and collating is performed by a browser.
- 6. (Original) A method according to claim 1 wherein the hypermedia comprises an XHTML document.

Filing Date: January 10, 2002

Page 14

7. (Previously Presented) A browser for a user agent for rendering hypermedia that includes at least one element that has a predetermined attribute whereby a dynamically assignable keyboard shortcut for the user agent actuates a predetermined functionality associated with the at least one element, the browser including software to provide:

parsing of the hypermedia;

identifying data corresponding to the at least one elements in the hypermedia that have been assigned a keyboard shortcut using said predetermined attribute; and rendering a display of the data.

- 8. (Original) A browser according to claim 7 for use with XHTML.
- 9. (Original) A mobile device including a browser as claimed in claim 7.
- 10. (Original) A browser according to claim 7 wherein the predetermined attribute is an accesskey function.
- 11. (Previously Presented) A device for rendering hypermedia received from a remote server, the device including a processor for processing the hypermedia and a user interface including a display device and a keyboard with a plurality of keys operable in a first mode to enter associated alphanumeric data, and operable in a second mode to actuate respective keyboard shortcuts dynamically assigned thereto by elements in the hypermedia, and wherein;

the processor and the display device being operable in a first display configuration to display the hypermedia;

the processor being operable to identify elements that define predetermined keyboard shortcuts in the hypermedia, and form an options list containing data associated with the identified elements; and

the processor and the display device being operable in a second display configuration to display the options list.

Filing Date: January 10, 2002

Page 15

- 12. (Original) A device according to claim 11 wherein the data associated with the identified elements comprise links to other hypermedia locations, and the keyboard is operable in the second display configuration to select and actuate one of the links.
- 13. (Original) A device according to claim 11 wherein the keyboard is operable to switch between the first display configuration in which the hypermedia is displayed and the second configuration in which the options list is displayed.
- 14. (Original) A device according to claim 11 wherein the display device is configured to scroll the displayed hypermedia in said first display configuration whereby the display can be scrolled through different scrolling positions, and the options list display for the second configuration is selectable independently of the scrolling position of the first display configuration.
- 15. (Original) A device according to claim 14 including a scrolling device to scroll the display of hypermedia in the first configuration.
- 16. (Original) A device according to claim 13 wherein the keys of the keyboard are operable with a relatively short key-press in the first mode and a relatively long key-press in the second mode.
- 17. (Original) A device according to claim 11 wherein the elements have an accesskey keyboard shortcut function.
- 18. (Original) A device according to claim 17 wherein numbering associated with the accesskey keyboard shortcut function is hidden in the display of hypermedia in the first display configuration.
- 19. (Previously Presented) A computer readable medium storing computer executable code that when executed by a processor performs the steps of:

Filing Date: January 10, 2002

Page 16

parsing hypermedia;

identifying data corresponding to elements that define predetermined keyboard shortcuts in the hypermedia; and

rendering a display of the data.

20. (Previously Presented) A signal including a carrier that carries instructions in the form of computer executable code that when executed by a processor provides:

parsing hypermedia;

identifying data corresponding to elements that define predetermined keyboard shortcuts in the hypermedia; and

rendering a display of the data.

21. (Previously Presented) A method of collating and providing a display of mark up language elements embedded in hypermedia that is loaded by a browser and at least partly rendered in a display of a mobile device, comprising:

parsing, using a processor of the mobile device, mark-up code of the hypermedia; identifying at least one mark up code element in the hypermedia having an accesskey attribute; and

rendering a list of the identified elements instead of the hypermedia in said display.

- 22. (Previously Presented) A method of claim 21 further comprising rendering the hypermedia, and wherein the rendering of the display including a list of the identified elements, instead of the hypermedia is performed in response to the operation of a control of the mobile device.
- 23. (Previously Presented) A method of claim 21 further comprising making a selection of an identified element in the list to select a functionality associated with the accesskey attribute.

Applicant: Robert Aarts et al.

Appl. No.: 10/041,610

Filing Date: January 10, 2002

Page 17

24. (Previously Presented) A method of claim 21, wherein the parsing and the collating is done by the browser.

- 25. (Previously Presented) A method of claim 21, wherein the hypermedia comprises an XHTML document.
  - 26. (Previously Presented) A device comprising:
  - a processor operable to run a browser; and
  - a display operable to display at least part of hypermedia loaded by the browser;

the processor further being operable to parse mark-up code of the hypermedia at least partly displayed in said display, identify at least one mark up code element in the hypermedia having been assigned an accesskey attribute and render a list including the identified elements for display, instead of the hypermedia, in said display.

Applicant: Robert Aarts et al. Appl. No.: 10/041,610 Filing Date: January 10, 2002 Page 18

#### 9. Evidence Appendix.

None.

Applicant: Robert Aarts et al. Appl. No.: 10/041,610 Filing Date: January 10, 2002 Page 19

#### Related Proceedings Appendix. 10.

None.

Applicant: Robert Aarts et al.

Appl. No.: 10/041,610

Filing Date: January 10, 2002

Page 20

## **CONCLUSION**

For at least the foregoing reasons, Applicants respectfully request that the rejections be reversed.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

Chad L. Thorson

Registration No. 55,675

Customer No. 00826 ALSTON & BIRD LLP Bank of America Plaza 101 South Tryon Street, Suite 4000 Charlotte, NC 28280-4000 Tel Charlotte Office (704) 444-1000 Fax Charlotte Office (704) 444-1111

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON JANUARY 31, 2007. LEGAL02/30215158v1